

Remarks

Claims 1-7 and 15-17 remain in the application. The Examiner has combined the newly cited patent to Thomas as applicable to the hinge teachings of Nagy and Barkley previously relied upon in stating a new grounds of rejection for the claims. However, Thomas is not analogous art to the structures taught in previously cited references, and the combination is not motivated by the teachings of any of the references of record. As a result, the claims are resubmitted without substantive amendment together with the following arguments in support of allowance of the application as stated in greater detail below.

The Examiner rejected claims 1-3 as unpatentable over Nagy in view of Thomas and Barkley. Nagy discloses a spring loaded vehicle hinge mechanism that requires both primary spring means and secondary spring means. In particular, a torsional spring 44 enhances only pop up of the lid from the closed position so as to reduce the size of the primary biasing mechanism, and therefore, does not motivate the skilled artisan to replace the primary biasing spring. Moreover, the coil spring 44 is not shaped as defined in claim 1 to include a first strand end at a first coil end, an opposite coil end and a second strand portion extending across from the opposite coil end to the first coil end. In view of the fact that the levers, to which the ends 50 and 48 of Nagy are connected, remain separated at opposite ends of the coil, there is no teaching or suggestion of any strand portion crossing across from a first coil end to a second coil end. Moreover, neither of the secondary references define a hinge biasing spring for vehicle closures that would be obvious to incorporate in the structure or suggest its implementation in the structure of Nagy.

The Examiner argued that Thomas teaches a spring having these features. However, Thomas adds little to the teachings of vehicle closures insofar as Thomas discloses a wire tooth used in farm implements such as rakes, hay loaders or harrows. There is no teaching or suggestion in Thomas or other references to incorporate its structure as a biasing spring in a vehicle closure hinge structure. The selection of an earth moving tool tooth to form a hinge biasing spring does not represent ordinary skill in vehicle body hinge structures.

Rather, selection of this reference is guided only by Applicant's disclosure and does not result from the teachings of relevant prior art. Rather, impermissible hindsight reasoning is required to combine a digging tooth in a vehicle closure hinge. As a result, the wire tooth of Thomas adds little to the teachings of Nagy that would motivate or teach the skilled artisan to change the structure of a motor vehicle closure hinge.

Likewise, Barkley teaches a linkage drive assembly for assisting in opening a deck lid in which energy intended to open the trunk is applied by a torque rod having at least one return bent portion. As a result, there is no teaching of a laterally coiled spring having a portion extending across the coil from an opposite coil end to a first coil end to engage the link assembly at the first coil end, permitting both ends of the coil spring act on the same side of the coil. As a result, the combined teachings of references fail to teach the invention as claimed or motivate a skilled artisan to modify one's teaching with the others' to construct such a structure.

The Examiner argued that it would have been obvious to provide the spring of Thomas in place of the spring of Nagy in order to prevent the need for excess attachment of the spring to a tab 52 in the mount 12. No teaching or suggestion from either of the references or other references of record addresses why one must prevent the need for excess attachment on the mount, or how this applies to combining a digging tooth with a vehicle closure hinge. As a result, Nagy's teaching being modified as argued by the Examiner is not a structure supported by ordinary skill, as neither reference would motivate the skilled artisan to combine these references as asserted by the Examiner.

The Examiner argued that Nagy as modified lacks a closure hinge mounted in a peripheral channel of the vehicle, but relied upon Barkley for teaching that feature. However, Barkley does not teach or suggest that mounting of the linkage and the spring in the channel is advantageous. In fact, Barkley claims and particularly relies upon the structure of a hinge box mounted in the interior of the trunk to support link assemblies 32 and 34. Moreover, those assemblies are shown not to be in any peripheral channel, even though other

structures may be viewed as a such. Rather, removal to the channel would appear to be a substantial departure from the teachings of Barkley. Accordingly, Barkley does not teach or suggest the channel mounting feature defined in claim 1.

Likewise, claim 2, which particularly defines that an integral assembly is installed as a unit in a channel defines a feature that is not shown by the multiple support linkages at each of the left and right sides of the deck lid hinge. Rather, that hinge is separate from the linkage drive taught by Barkley. Accordingly, Barkley does not teach or suggest moving the structure of Nagy to a peripheral channel by forming an integral assembly installed as a unit in a channel as defined in claim 2. Moreover, neither Barkley nor other references teach geometrically shaping a strand forming a laterally coiled spring as defined in claim 3. Accordingly, the claims particularly and patentably define the present invention under 35 U.S.C. § 103 over the patents relied upon by the Examiner and the other references of record.

The Examiner rejected claims 1 and 6-7 under 35 U.S.C. § 103 as unpatentable over Borsani in view of Thomas and Barkley. Contrary to the Examiner's argument that Borsani discloses a vehicle closure hinge, Borsani teaches a hinge for doors of an article of furniture. Moreover, Borsani expressly refers to doors that are urged by resilient means to both the closed position and an open position, depending upon how far over center the door is displaced. Thus, unlike motor vehicle hinges in which the resiliency tends to open the deck lid or hood to counteract the weight of the hood, where closing is accomplished effectively by the weight of the deck lid or hood. As a result, there is no teaching or suggestion in Borsani that the structure or function of the patented furniture hinge invention is applicable to or useful in motor vehicle hinges. Likewise, Borsani fails to teach a laterally coiled strand forming a coil that has a first strand end at a first coil end and a second strand end extending across the coil from the opposite coil end to the first coil end.

The Examiner argued that Thomas teaches a spring integrally carried by a vehicle hinge link assembly having a laterally coiled strand or the strand portion extending across the coil from the opposite end of the coil end. However, as discussed above, Thomas

does not teach a spring integrally carried by a link assembly for motor vehicle closure hinges. Rather, Thomas discloses a tooth for a digging implement that is not analogous to biasing springs for motor vehicle hinges. Rather, the only relationship between a digging tool tooth and biasing springs for a vehicle closure hinge is the similarity in structure guided by Applicant's disclosure using impermissible hindsight reasoning. Such a combination of separately classified inventions does not form a proper ground for rejection under 35 U.S.C. § 103.

Moreover, as discussed above, Barkley adds little to the teachings of Borsani and Thomas that renders the present invention obvious under 35 U.S.C. § 103, for the reasons set forth in the responses to the previously addressed rejections. Moreover, with regard to claim 6, no statement of a Watt six bar linkage is taught by Borsani, particularly in light of the two way biasing in Borsani. Moreover, the Examiner's argument that two bars 5 and 9 in Borsani are duplicates is unsupported by the disclosure of Borsani. The extensions 9' and 5' of the levers 9 and 5, respectively, have substantially different lengths according to the embodiment illustrated by Borsani. Moreover, these deficiencies of Borsani are not made up by either Thomas or Barkley. These references do not form a proper ground for an obviousness rejection of the subject matter of the claim under 35 U.S.C. § 103.

The Examiner rejected claims 15-16 under 35 U.S.C. § 103(a) as unpatentable over Borsani in view of Thomas. The arguments made above opposing the rejection of claims 1 and 6-7 are equally applicable to this rejection. Neither Borsani nor Thomas teach any vehicle closure hinges, nor any motivation for person of ordinary skill in the art to apply their teachings to such devices. Borsani discloses a toggle hinge that uses a spring to bias linkage in two directions, so that both the open and closed position may be maintained. The direction of biasing depends on the linkages position with respect to an over center alignment. Moreover, there is little motivation for one of ordinary skill in the art to apply the teachings of a digging tool to a furniture hinge in order to construct the Watt six bar link assembly, which is not disclosed in either. Accordingly, the rejection under 35 U.S.C. § 103 is improper and should be withdrawn.

The Examiner rejected claim 17 under 35 U.S.C. § 103(a) as unpatentable over Borsani and Thomas and further in view of Barkley. Stated objections to this combination of references in the previous arguments opposing the rejections are equally applicable to this rejection. Moreover, the key features of Borsani are not mounted in the peripheral channel of the vehicle body. In fact, the prior art teaches separation of those features from other hinge parts that may be so mounted. Accordingly, there is no motivation or suggestion to install the link assembly as a unit in the peripheral channel. To the contrary, important features of Barkley are added outside of the channel and teaches away from incorporating the entire assembly in a peripheral channel.

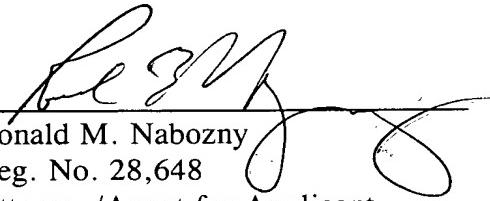
Claims 4 and 5 remain allowable as previously indicated by the Examiner.

In view of the foregoing, Applicant respectfully submits that the present application is now in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

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Date: March 2, 2006

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